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Culture, Tourism and the Centre for Education Statistics

Economic Contribution of the Culture Sector in Ontario

by Vik Singh

Culture, Tourism and the Centre for Education Statistics Division
2001 Main Building, Ottawa, K1A 0T6
Telephone: 1 800 307-3382 Fax: 1 613 951-9040

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Economic Contributions of the Culture Sector in Ontario

By Vik Singh
Statistics Canada

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Abstract

In this paper, we estimate and analyze the economic impact of the culture sector on Ontario's economy. This is done by measuring the contribution of the culture sector to Ontario's GDP and employment. We also analyze individual culture sub-sectors in terms of their contributions to GDP and employment. Results show that GDP from the culture sector amounted to more than $17 billion (4% of Ontario's GDP) in 2001. Similarly, the contribution of the culture sector to Ontario's employment numbers was more than 250,000 (4% of Ontario's employment) in 2001. In addition, GDP and employment in Ontario's culture sector rose 34% and 18%, respectively, from 1996 to 2001.

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1. Introduction

This paper estimates and analyses the economic impact of the culture sector on Ontario's economy. The term "economic impact" describes the economic contribution of an industry or activity to the economy. More specifically, it refers to the contribution of an industry or an economic activity to Gross Domestic Product (GDP) and employment. This paper estimates the economic impact of the culture sector on Ontario's economy in terms of its contribution to the province's GDP and employment for the period 1996–2001.[1] In addition, the GDP and employment contributions of individual culture sub-sectors are also calculated for the same period.[2]

In order to study the economic contribution of the culture sector to Ontario's economy, it is vital to be able to define what the culture sector is. The *Canadian Framework for Culture Statistics* provides a comprehensive definition of culture. According to the framework, culture is defined as "creative artistic activity and the goods and services produced by it, and the preservation of human heritage."[3]

It is important to estimate the economic impact of the culture sector, because just like other sectors of the economy, the culture sector has an effect on the economy. For example, individuals employed in the "business" of creating, producing, manufacturing and distributing culture goods and services not only increase employment but also receive income just like other workers in the economy, further adding to the country's GDP. Likewise, whether they are individual artists producing art, or part of a larger organization staging arts performances, these culture activities require various goods and services that must be purchased within an economy, which further adds value to the economy.

In addition to estimating the economic impact of the culture sector on Ontario's economy, this paper also answers some questions related to the issue of economic impact.[4] Is the economic impact of the culture sector on Ontario's economy growing or declining? How does the culture sector in Ontario compare with the overall economy in Ontario? Which culture sub-sector saw a rise or decline in its contribution to GDP and which activities, such as creation, production, etc., spearheaded this change? How do culture workers in Ontario compare with the overall workforce in the province? Are most of the jobs created in the culture sector part-time or full-time? What conditions prevail for self-employment in the culture sector?

Although it is important to measure the economic impact of the culture sector, purely economic considerations can fail to reflect social and aesthetic values that are fundamental to this sector. There are numerous studies that highlight the "social benefits" of the culture sector, such as the one by Melo (2002). These indirect benefits of the culture sector are difficult to quantify and are beyond the scope of this paper.

This paper is structured as follows. Section 2 explains the impact of culture GDP on Ontario's economy and provides an estimate of the GDP from various culture sub-sectors. Section 3 details the economic impact of culture on employment, including employment contributions of various culture sub-sectors. This is followed by a discussion of the economic impact of culture by various types of activities in Section 4 and a conclusion in Section 5.

2. Culture sector GDP

Gross Domestic Product (GDP) is an important element in studying the concept of economic impact. The value added method is used to calculate GDP. GDP is defined as the value added of all industries in a country.

GDP from the culture sector in Ontario amounted to more than $17 billion in 2001, an increase of 34% from the 1996 figure of approximately $13 billion (Table 1). The culture sector averaged 4% of Ontario's GDP over the period 1996 to 2001.

Table 1
Culture GDP

	1996	1997	1998	1999	2000	2001	Average (1996-2001)	Percentage change (1996-2001)	Average annual growth rate (1996-2001)
GDP from culture sector in Ontario ($ millions)	13,380	13,524	14,480	15,767	17,539	17,929	15,437	34	6
GDP in Ontario ($ millions)	310,920	331,339	348,261	376,877	406,595	434,801	368,132	40	7
Culture as percentage of GDP in Ontario	4	4	4	4	4	4	4		
GDP from culture sector in Canada ($ millions)	29,233	30,441	32,375	33,953	37,489	38,486	33,663	32	6
Ontario's percentage share of Canadian culture GDP	46	44	45	46	47	47	46		

Note:

For an explanation on the methodology, refer to Appendix C.

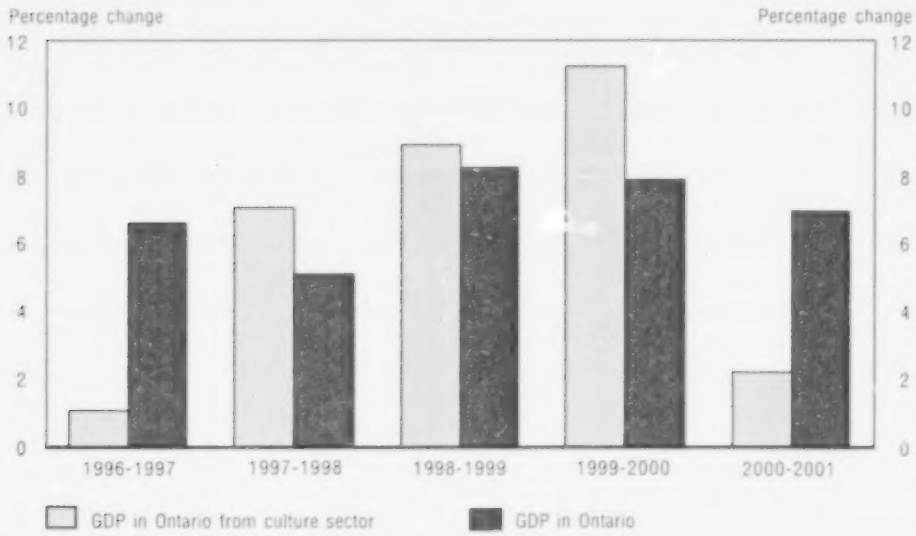
Source: *Statistics Canada.*

Ontario was a major contributor to Canada's culture sector, accounting for almost half (47%) of Canadian culture GDP in 2001. The growth rates of culture sector GDP also indicate that the culture sector has become increasingly important to Ontario's economy. Overall, culture GDP showed a steady growth during the period 1996 to 2001 (Table 1).

Over the 1996 to 2001 period, GDP from Ontario's culture sector grew more slowly than did total GDP in Ontario (34% versus 40%) (Table 1). Nevertheless, GDP from Ontario's culture sector grew faster than overall GDP in Ontario in every year except 1996 to 1997 and 2000 to 2001 (Figure 1). The biggest growth in Ontario's culture GDP occurred between1999 and 2000 (11%)[5] and the smallest growth (1%) between 1996 and 1997. Meanwhile, Ontario's culture sector GDP grew slightly faster than did the overall culture sector GDP in Canada (34% versus 32%) over the same period.

Figure 1

Culture sector GDP grew more slowly than overall GDP in Ontario from 1996 to 1997 and from 2000 to 2001



Source: *Statistics Canada*

2.1 GDP in culture sub-sectors

In this section, the GDP from various culture sub-sectors are estimated using the *Canadian Framework for Culture Statistics* (Statistics Canada, 2004). Table 2 breaks out the culture sub-sector's contribution to Ontario's GDP from 1996 to 2001.[6] The GDP for culture sub-sectors are mostly calculated using the *Value added* method. The data are mainly obtained from the *System of National Accounts (SNA)* using the *North American Industry Classification System (NAICS)*. Where data from the *SNA* are not available, various business surveys are used to measure the GDP.[7] However, data from these surveys act only as a proxy for the missing information for a particular industry and should not be used as official GDP data for that industry.

Table 2

Culture GDP by sub-sectors in Ontario

Culture sub-sectors ($ millions)	1996	1997	1998	1999	2000	2001	Average (1996-2001)	Percentage share of culture GDP (average 1996-2001)
Written media	5,659	5,933	6,272	6,859	7,847	8,281	6,809	48
Broadcasting	1,244	1,368	1,402	1,520	1,654	1,796	1,497	11
Film industry	1,077	1,040	1,271	1,376	1,448	1,500	1,285	9
Advertising	843	845	853	1,074	1,240	1,227	1,014	7
Performing arts	645	586	645	655	564	587	614	4
Visual arts	584	510	537	578	547	455	535	4
Libraries	511	519	515	523	507	506	513	4
Sound recording and music publishing	501	539	568	432	466	455	493	4
Design	411	413	422	455	499	512	452	3
Architecture	305	254	342	367	501	451	370	3
Heritage	282	289	305	331	336	355	316	2
Photography	153	105	106	171	181	165	147	1
Festivals	5	5	7	8	8	11	7	0

Notes:

1. The percentage shares of culture GDP are calculated without including "Support Services," since this activity is not allocated to any culture sub-sector.
2. The GDP from culture sub-sectors are calculated mainly using the *Value added* method.
3. Festival data are derived from Department of Canadian Heritage and only include those festivals which received funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of the festival sector and the festival estimates should be used with caution.

Source: *Statistics Canada.*

Written media, which includes establishments engaged in the publishing industry (newspapers, books and periodicals), was the biggest contributor to culture GDP in Ontario. It amounted to more than $6 billion and averaged 48% of culture GDP in Ontario annually, from 1996 to 2001 (Table 2). Newspaper publishing generated most of the GDP for this sub-sector. More than half of *Written media* GDP came from establishments engaged in production activities.[8]

Other major contributors to culture GDP were *Broadcasting* and *Film industry*, with 11% and 9% of culture GDP, respectively. Together, the top three sub-sectors, *Written media, Broadcasting* and *Film industry*, saw their respective shares in culture GDP rise and together generated almost 70% of culture GDP, over the period 1996 to 2001.

Broadcasting, which includes establishments engaged in private and public broadcasting (radio and television), averaged approximately $1.5 billion annually in GDP from 1996 to 2001 (Table 2). Private broadcasting averaged most (around 74%) of the GDP for *Broadcasting*, the majority of which came from television broadcasting as opposed to radio broadcasting.

The third largest culture sub-sector contributing to GDP was the *Film industry*, composed of establishments engaged in the creation, production and distribution of motion pictures, film and video. This sub-sector averaged approximately $1.3 billion annually in GDP, over the period (Table 2). Most of the GDP in the *Film industry* came from establishments engaged in production (26%) and manufacturing (29%) activities.

2.2 Growth in GDP in culture sub-sectors

Most of the culture sub-sectors in Ontario, except *Sound recording and music publishing* (-9%), *Performing arts* (-9%), *Visual arts* (-22%) and *Libraries* (-1%), reported an increase in GDP from 1996 to 2001 (Table 3). After *Festivals*, *Architecture* reported the second largest growth (48%) in culture GDP from 1996 to 2001. Establishments engaged in production and distribution activities contributed the most to the growth in GDP in this sub-sector.

Written media was the third fastest growing culture sub-sector in terms of GDP, reporting a growth of 46% from 1996 to 2001. Establishments engaged in creation and production activities contributed the most to the growth in GDP for this sub-sector (Appendix A). *Written media, Broadcasting, Design* and *Heritage* experienced growth in their GDP for all periods studied in this paper (Table 3).

Table 3

GDP growth rates in culture sub-sectors in Ontario

	Percentage change						Average annual percentage growth rate
Culture sub-sectors	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	1996-2001	(1996-2001)
Festivals	-3	36	11	7	29	103	16
Architecture	-17	35	7	36	-10	48	10
Written media	5	6	9	14	6	46	8
Advertising	0.2	1	26	15	-1	46	8
Broadcasting	10	3	8	9	9	44	8
Film industry	-3	22	8	5	4	39	7
Heritage	2	5	9	2	5	26	5
Design	0.4	2	8	10	2	25	5
Photography	-31	1	61	6	-9	8	6
Libraries	2	-1	2	-3	-0.2	-1	-0.2
Performing arts	-9	10	2	-14	4	-9	-1
Sound recording and music publishing	8	5	-24	8	-2	-9	-1
Visual arts	-13	5	8	-6	-17	-22	-4

Source: *Statistics Canada.*

3. Impact of culture on employment

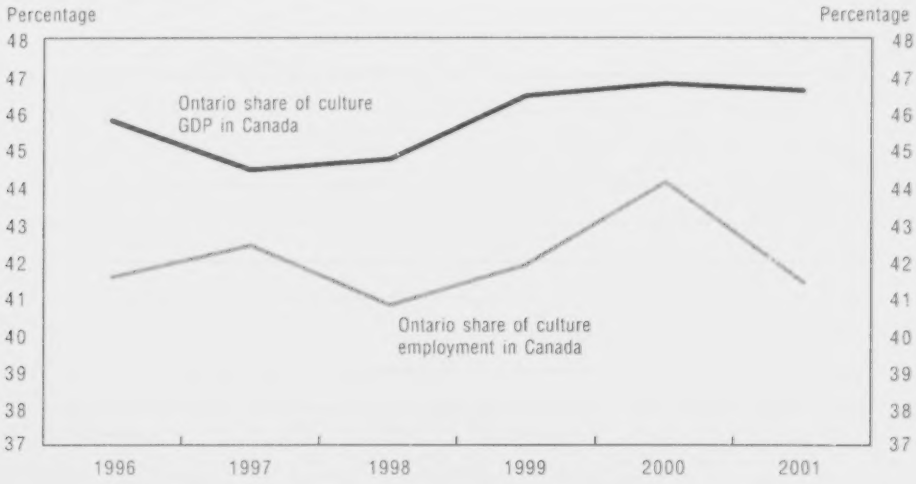
The growing importance of the culture sector to Ontario's economy can also be measured in terms of employment. Estimating the employment in Ontario's culture sector involved calculating the number of all paid employees, including full-time, part-time and freelancers. The *Labour Force Survey (LFS)*[9] was used to derive most of the employment numbers, although some were derived from other surveys.[10] The term "employment" in our paper refers to individuals, 15 years and over, who were working during the survey reference period. It should be noted that employment estimates in this paper do not include volunteers.

In this paper, only the direct jobs created by the culture sector are estimated. These are jobs that are directly generated by establishments in the culture sector and do not include jobs created indirectly. Although these direct jobs[11] are among the most visible economic impacts of the culture sector, they do not represent the only economic impact from employment. Other jobs can be generated indirectly by the culture sector through the *multiplier effect*. These indirect jobs are located throughout the economy in the businesses that provide supplies or business services to the culture sector. Indirect jobs are also generated when culture sector employees spend their incomes on items such as groceries, retail shops, personal services, health care, etc.[12] Indirect effects from employment are not estimated in this paper.

On average, close to a quarter million residents in Ontario worked in the culture sector in any given year in the period 1996 to 2001 (Table 4). Around 253,100 workers were employed in Ontario's culture sector, accounting for approximately 4% of Ontario's workforce in 2001. Ontario also had a significant share of the total employment generated by the culture sector in Canada (42%), over the period 1996 to 2001 (Table 4 and Figure 2). However, Ontario's share of culture employment was lower than its share of culture GDP in Canada (42% versus 46%), on average, over the same period.

Figure 2

Ontario had a significant share of Canada's culture employment and culture GDP



Source: *Statistics Canada.*

Table 4

Culture employment

	1996	1997	1998	1999	2000	2001	Average (1996-2001)	Percentage change (1996-2001)	Average annual percentage growth rate (1996-2001)
Employment from culture sector in Ontario	215,200	217,600	219,100	232,100	266,950	253,100	234,008	18	4
Employment in Ontario	5,180,800	5,313,400	5,490,000	5,688,100	5,872,100	5,962,700	5,584,500	15	3
Percentage of employment in Ontario from culture sector	4	4	4	4	5	4	4		
Employment from culture sector in Canada	517,800	513,100	537,300	554,200	604,900	611,000	556,400	18	3
Percentage of culture employment in Canada from Ontario	42	42	41	42	44	41	42		

Table 5

Characteristics of culture workers

	1996	1997	1998	1999	2000	2001	Average (1996-2001)
				%			
Culture sector workers employed full-time in Ontario	79	79	79	81	81	82	80
Workers employed full-time in Ontario	81	81	81	82	82	82	82
Culture sector workers employed full-time in Canada	79	78	78	80	79	80	79
Unemployment rate in culture sector in Ontario	6	5	4	4	4	4	5
Unemployment rate in Ontario	9	8	7	6	6	6	7
Unemployment rate in culture sector in Canada	6	6	5	5	4	5	5
Culture sector in Ontario							
Employment in public sector	8	6	8	6	6	7	7
Employment in private sector	67	67	64	70	70	69	68
Self-employed	25	27	28	24	24	24	25
Ontario							
Employment in public sector	18	17	16	17	17	17	17
Employment in private sector	68	67	68	67	68	69	68
Self-employed	15	16	16	16	16	15	16
Culture sector in Canada							
Employment in public sector	9	8	8	7	7	7	8
Employment in private sector	66	65	64	67	67	67	66
Self-employed	25	27	28	26	26	25	26

Notes:

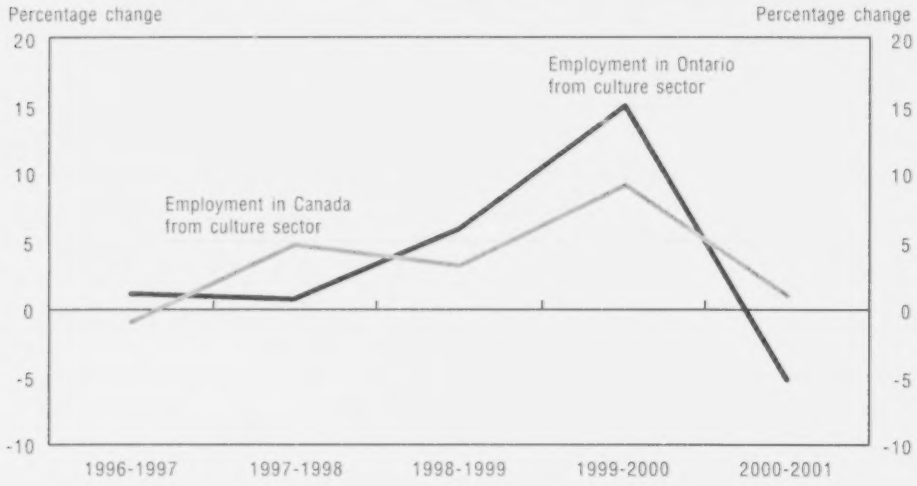
1. The total culture employment was calculated by using *Labour Force Survey (LFS)* and other surveys (where data from *LFS* was not available).
2. Please note that employment estimates are rounded to the nearest hundred.
3. The unemployment rate, full-time rate employment and the breakdown of employment into public, private and self-employed was calculated using only the *Labour Force Survey (LFS)*.

Source: *Statistics Canada.*

Overall, employment in the culture sector in Ontario grew more between 1996 and 2001 (18%) than did total provincial employment (15%), with the greatest increase occurring beween 1999 and 2000. However, employment in Ontario's culture sector grew at the same rate as did overall employment in the culture sector in Canada (18%) between 1996 and 2001 (Table 4).

Figure 3

Growth in culture sector employment varied over the period



Source: *Statistics Canada.*

Table 5 shows that the unemployment rate in Ontario's culture sector was lower than that of the overall unemployment rate in Ontario. The unemployment rate in the culture sector averaged 5% compared to 7% for all of Ontario, for the period 1996 to 2001. A larger proportion of the culture workforce was self-employed compared to the overall economy of Ontario (25% versus 16%) for the same period (Figure 4). The higher prevalence of self-employment in the culture sector was due to the project-based nature of much of the work in this sector. *Film industry* provides a good example of project-based work, with each film production designed as a separate project.

Another important observation is that only 7% of Ontario's culture sector workers were engaged in the public sector compared to 17% of all workers in Ontario, on average, over the period 1996 to 2001. Table 5 also shows that the proportion of Ontario's culture workers engaged in the public sector declined from 8% in 1996 to 7% in 2001. This decline was offset by an increase in culture workers in the private sector and by an increase in self-employment over this period. Average public sector employment in Ontario's culture sector was also lower than the average total public sector employment in Canada's culture sector (7% versus 8%).

Figure 5 shows that culture workers were less likely to work full-time than workers in general in Ontario (80% versus 82%), for the period 1996-2001. This is due to the unique nature of some culture occupations, such as writing, which tend to be part-time. However, culture workers in Ontario were slightly more likely to work full-time than were overall culture workers in Canada (80% versus 79%), as shown in Figure 5.

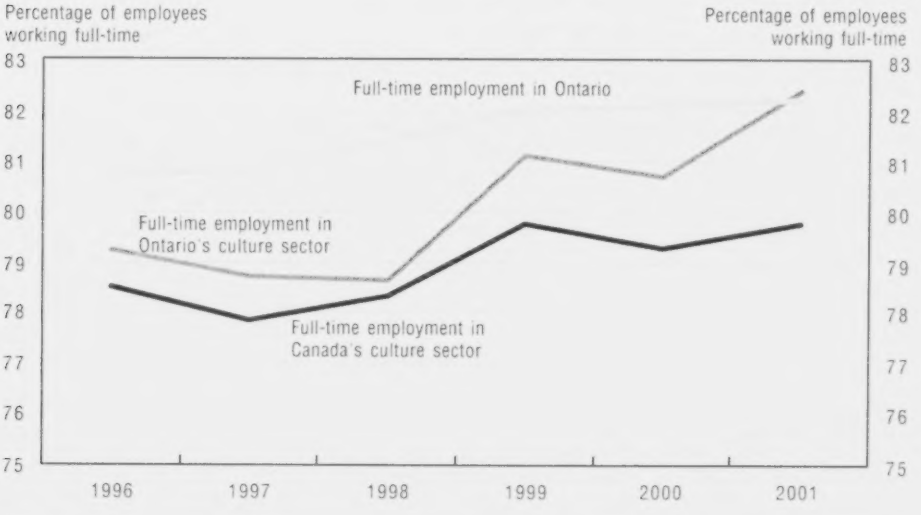
Figure 4

Self-employment in Ontario's culture sector was higher than the overall self-employment in Ontario but slightly lower than the self-employment in Canada's culture sector

Source: *Statistics Canada.*

Figure 5

Full-time employment in Ontario's culture sector was generally higher than the full-time employment in Canada's culture sector



Source: *Statistics Canada.*

3.1 Employment in culture sub-sectors

The breakdown of culture sector employment in Ontario by sub-sectors from 1996 to 2001 is shown in Table 6.[13] *Written media* was the largest culture sub-sector in terms of employment, averaging 34% of culture sector employment, over the period 1996 to 2001. Employment in this sub-sector rose by 3,600 workers to 73,500 workers in 2001. As was the case with GDP, newspaper publishing generated the majority of employment in *Written media*. Most of the workers in this sub-sector were employed in establishments engaged in production activities (44%), on average, over the period 1996 to 2001 (Appendix B).

Table 6

Culture employment by sub-sectors in Ontario

Culture sub-sectors	1996	1997	1998	1999	2000	2001	Average (1996-2001)	Percentage share of culture employment (average 1996-2001)
Written media	69,900	74,100	67,000	68,200	77,300	73,500	71,700	34
Film industry	15,400	17,400	22,700	26,800	33,600	32,200	24,700	12
Advertising	17,400	22,200	20,600	18,700	26,000	24,300	21,500	10
Design	20,100	20,300	19,700	22,200	23,200	21,300	21,100	10
Broadcasting	15,300	13,700	14,800	17,400	21,300	21,800	17,400	8
Libraries	11,100	11,100	11,100	11,000	11,100	11,000	11,100	5
Heritage	10,400	10,500	10,900	11,100	11,500	11,700	11,000	5
Performing arts	10,800	9,000	7,300	7,600	8,300	7,700	8,400	4
Sound recording and music publishing	5,500	6,600	7,700	6,500	6,500	6,300	6,500	3
Architecture	4,400	3,700	4,600	7,400	9,900	7,900	6,300	3
Visual arts	6,200	5,100	7,700	6,600	5,600	5,000	6,000	3
Photography	5,200	3,100	1,700	4,800	4,400	5,100	4,000	2
Festivals	400	400	500	500	500	600	500	0

Notes:

1. The percentage shares of culture employment are calculated without including "Support Services," since this activity is not allocated to any culture sub-sector.
2. Employment estimates are rounded to the nearest hundred.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which received funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of the festival sector. The festival estimates should be used with caution.

Source: *Statistics Canada.*

The other two major culture sub-sectors in terms of employment were *Film industry* and *Advertising*, accounting for 12% and 10% of culture sector employment, respectively (Table 6). Around 24,700 workers were employed in *Film industry*, on average, over the period. Workers in establishments engaged in production (35%) and distribution (27%) activities accounted for most of the employment in this sub-sector. On average, employment in the *Advertising* sub-sector amounted to 21,500 individuals, most of whom were employed by establishments engaged in production activities.

3.2 Employment growth in culture sub-sectors

Except for *Performing arts* (-29%), *Visual arts* (-19%), *Photography* (-2%) and *Libraries* (-0.9%), employment in all culture sub-sectors in Ontario reported a growth between 1996 and 2001 (Table 7). The *Film industry* reported the strongest growth in culture employment, more than doubling over the period, mainly due to the growth in employment in establishments engaged in production activities. Two other rapidly growing culture sub-sectors were *Architecture* and *Festivals*, with growth rates of 80% and 50% between 1996 and 2001, respectively. *Performing arts* had the sharpest decline in employment. This was mainly due to a decline in employment in establishments engaged in creation activities.

Table 7

Employment growth rates in culture sub-sectors in Ontario

	Percentage change						Average annual percentage growth rate
Culture sub-sectors	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	1996-2001	(1996-2001)
Film industry	13.0	30.5	18.1	25.4	-4.2	109.1	16.5
Architecture	-15.9	24.3	60.9	33.8	-20.2	79.5	16.6
Festivals	0.0	25.0	0.0	0.0	20.0	50.0	9.0
Broadcasting	-10.5	8.0	17.6	22.4	2.3	42.5	8.0
Advertising	27.6	-7.2	-9.2	39.0	-6.5	39.7	8.7
Sound recording and music publishing	20.0	16.7	-15.6	0.0	-3.1	14.5	3.6
Heritage	1.0	3.8	1.8	3.6	1.7	12.5	2.4
Design	1.0	-3.0	12.7	4.5	-8.2	6.0	1.4
Written media	6.0	-9.6	1.8	13.3	-4.9	5.2	1.3
Libraries	0.0	0.0	-0.9	0.9	-0.9	-0.9	-0.2
Photography	-40.4	-45.2	182.4	-8.3	15.9	-1.9	20.9
Visual arts	-17.7	51.0	-14.3	-15.2	-10.7	-19.4	-1.4
Performing arts	-16.7	-18.9	4.1	9.2	-7.2	-28.7	-5.9

Source: *Statistics Canada.*

4. Economic impact of culture by activity

The economic benefit of the culture sector extended to almost every activity of the economy, such as creation, production, preservation, manufacturing and distribution. Text Box 1 describes the various activities that make up the chain associated with culture activities.[14]

All activity components of Ontario's culture sub-sectors showed gains in GDP and employment over the period 1996 to 2001 (Table 8). Establishments engaged in production activities were the biggest contributors to GDP and employment. They averaged approximately 51% of culture GDP and 46% of culture employment over this period.

Table 8

GDP and employment in Ontario's culture sector by activities

Culture activities ($ millions)	1996	1997	1998	1999	2000	2001	Average (1996-2001)	Percentage share (average (1996-2001)	Percentage change 1996-2001)
					GDP				
Production	6,685	6,844	7,354	8,064	8,781	9,025	7,792	51	35
Manufacturing	2,628	2,611	2,802	2,968	3,368	3,604	2,997	20	37
Creation	2,045	2,008	2,141	2,370	2,665	2,655	2,314	15	30
Support services	1,159	1,118	1,235	1,418	1,740	1,628	1,383	9	26
Distribution	863	942	948	947	985	1,017	950	6	18
Culture activities					Employment				
Production	98,400	105,700	102,100	103,600	124,600	117,500	108,700	46	19
Creation	41,800	39,400	40,400	50,200	56,700	51,300	46,600	20	23
Manufacturing	32,800	33,000	35,600	34,500	33,500	36,300	34,300	15	11
Support services	23,200	20,700	22,900	23,200	28,000	24,800	23,800	10	7
Distribution	19,100	18,900	18,100	20,800	24,100	23,200	20,700	9	21

Notes:

1. The *Value added* method was mainly used to calculate GDP. See Appendix C for an explanation of the methodology.
2. Employment estimates are rounded to the nearest hundred.

Source: *Statistics Canada.*

Establishments engaged in manufacturing activities were the second biggest contributor to culture GDP (20%) in Ontario. On the other hand, establishments engaged in creation activities were the second largest contributor to culture employment (20%) over the same period. Establishments engaged in manufacturing activities reported the highest GDP growth (37%), whereas establishments engaged in creation reported the highest growth in employment (23%) from 1996 to 2001.

Establishments engaged in manufacturing and production reported higher GDP growth rates than did the overall culture sector. In addition, establishments engaged in production, creation and distribution activities reported higher employment growth rates than did those of the overall culture sector.

Text Box 1: Classification of enterprises by type of cultural activity

- ***Creation*** – These are establishments involved in the development of a creative artistic idea. This would include, for instance, independent artists, writers and performers (NAICS 71151). Much of this creative activity, however, can be undertaken in other establishments whose primary activity is something other than creation (for example, newspapers).
- ***Production*** – These include establishments involved primarily in the act or process of producing a creative good or service that can be readily identified. Goods are tangible (books, magazines, sound recordings) while services are intangible (concerts, theatre performances, or exhibitions at art galleries).
- ***Manufacturing*** – These are establishments involved in the mass reproduction of culture core goods (film duplication, printing, visual arts posters) from a master copy.
- ***Distribution*** – These include establishments that distribute core culture goods as well as engage in the mass distribution of visual arts and photography to a variety of players such as wholesalers and retailers, radio and television broadcasters, or the Internet.
- ***Support*** – These are activities related to culture that help to finance or support creation and production (copyright collectives, agents, managers, promoters).

Source: *Statistics Canada (2004).*

5. Conclusion

This paper explores the role of the culture sector in Ontario's economy. The culture sector generated more than $17 billion in GDP in 2001. GDP from Ontario's culture sector also grew faster than Ontario's GDP from 1996 to 2001.

Similar positive trends were found in employment. The culture sector employed almost a quarter million individuals in 2001. Employment in Ontario's culture sector grew at approximately the same rate as employment in Canada's culture sector between 1996 and 2001.

Most of the employment reported in Ontario's culture sector occurred in full-time activities. However, compared to the overall workforce in Ontario, a lower proportion of culture workers in Ontario worked full-time.

Self-employment was an important employment generator for the culture sector in Ontario. Almost a quarter of culture workers in Ontario were self-employed in 2001. This was higher than the proportion of all workers in Ontario who were self-employed. The culture sector in Ontario was also less reliant on the public sector.

Written media was the biggest sub-sector in terms of contribution to culture GDP and employment, over the period 1996 to 2001. Establishments engaged in production activities contributed the most to both GDP and employment in the culture sector.

Although the culture sector accounted for less than 5% of both Ontario's GDP and employment, on average, the results show that GDP from Ontario's culture sector increased faster than the overall GDP in Ontario. In addition, the growth rate reported by culture employment exceeded the growth rate reported by overall employment in Ontario. These positive trends in GDP and employment contributions demonstrate the importance of the culture sector as a significant contributor to Ontario's economic growth.

Key findings

- In 2001, the culture sector contributed more than $17 billion to Ontario's Gross Domestic Product (GDP), an increase of more than $4 billion from 1996. The culture sector represented 4% of Ontario's GDP in 2001.
- Compared to the other provinces in Canada, Ontario was a significant contributor to Canada's culture sector, accounting for almost half of Canada's culture sector GDP in 2001.
- GDP from Ontario's culture sector grew more slowly than did overall GDP in Ontario (34% versus 40%) over the period 1996 to 2001. However, GDP from Ontario's culture sector slightly exceeded the overall growth rate of Canada's culture sector over the same period (34% versus 32%).
- *Written media* was the biggest culture sub-sector in terms of GDP generation – it accounted for almost half of culture GDP in Ontario, on average, over the period 1996 to 2001.
- All culture sub-sectors except *Sound recording and music publishing*, *Performing arts*, *Visual arts* and *Libraries* reported growth in GDP from 1996 to 2001.
- In 2001, 4% of Ontario's workforce, or more than a quarter million individuals, were employed in the culture sector.
- Employment in Ontario's culture sector grew faster than total employment in Ontario from 1996 to 2001 (18% versus 15%).
- Most culture jobs in Ontario were full-time. However, compared to the overall average in Ontario, a smaller proportion of culture sector jobs were full-time. On average, over the period, 80% of Ontario's culture workers were employed full-time, compared to 82% for Ontario's workers as a whole.
- The unemployment rate in the culture sector was lower than the all-industry average at 5%, compared to 7% overall, on average, between 1996 and 2001.
- Approximately one in four workers in Ontario's culture sector were self-employed, compared with 16% across all industries, on average, over the period 1996 to 2001.
- Only 7% of Ontario's culture work force was engaged in the public sector, compared to 17% of all workers, on average, between 1996 and 2001.
- *Written media* was the biggest culture sub-sector in terms of employment – it accounted for almost 34% of culture employment in Ontario, on average, over the period 1996 to 2001.

- Other than *Performing arts*, *Visual arts*, *Photography* and *Libraries*, all culture sub-sectors reported growth in employment over the period 1996 to 2001. *Film industry* reported the highest growth in employment (109%) over the period.
- Establishments engaged in production activities contributed the most to culture GDP (51%) and employment (46%) in Ontario. Establishments engaged in manufacturing (59%) and creation (23%) activities reported the fastest growth in GDP and employment in Ontario from 1996 to 2001.

References

Melo, D. (2002), "Economics and Culture: Two Case Studies in Colombia," Presented at the International Symposium on Culture Statistics, Montreal, available at: www.colloque2002symposium.gouv.qc.ca, viewed on July 27, 2004.

Singh, V. (2004), "Economic Contribution of Culture in Canada," *Research Paper Series*, Catalogue no. 81-595-MIE2004023, Culture Statistics Program, Statistics Canada, available at: http://dissemination.statcan.ca:8083/english/research/81-595-MIE/81-595-MIE2004023.pdf.

Statistics Canada (2004), "Canadian Framework for Culture Statistics," *Research Paper Series*, Catalogue no. 81-595-MIE2004021, Culture Statistics Program, Statistics Canada, available at: http://dissemination.statcan.ca:8083/english/research/81-595-MIE/81-595-MIE2004021.pdf.

Appendix A: GDP in culture sub-sectors

Table A.1

Culture GDP in Ontario, 1996

Culture sub-sectors (current $ millions)	Creation	Production	Support services	Manu-facturing	Distribution	**Total**
Written media	369	2,941	A	2,154	196	**6,840**
Film industry	223	300	A	294	261	**1,077**
Broadcasting:	45	886	A	...	312	**1,244**
Private:	...	*758*	...	...	*184*	...
Television	...	*687*	...	...	*113*	...
Radio	...	*71*	...	...	*71*	...
Public and non-commercial	...	*128*	...	...	*128*	...
Sound recording and music publishing	93	155	A	180	74	**501**
Performing arts	49	597	A	...	A	**645**
Visual arts	408	165	A	A	10	**584**
Architecture	305	...	A	...	...	**305**
Photography	142	.	A	...	10	**153**
Design	411	...	...	...	...	**411**
Advertising	A	843	...	...	...	**843**
Festivals	A	5	A	...	...	**5**
Heritage:	...	282	A	...	...	**282**
Excluding nature parks	...	*214*	...	...	...	...
Nature parks	...	*68*	...	...	...	...
Libraries	.	511	A	...	...	**511**
Total	2,045	6,685	1,159	2,628	862	13,380

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. The *Value added* method was mainly used to obtain individual sub-sector GDP. For an explanation of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.
4. Please note that the totals may not add up due to rounding.

Source: *Statistics Canada.*

Table A.2

Culture GDP in Ontario, 1997

Culture sub-sectors (current $ millions)	Creation	Production	Support services	Manu-facturing	Distribution	**Total**
Written media	441	3,134	A	2,135	224	**7,057**
Film industry	243	234	A	300	263	**1,040**
Broadcasting:	56	949	A	...	362	**1,368**
Private:	...	*800*	...	...	*214*	...
Television	...	*718*	...	...	*131*	...
Radio	...	*82*	...	...	*82*	...
Public and non-commercial	...	*149*	...	...	*149*	...
Sound recording and music publishing	132	156	A	176	75	**539**
Performing arts	31	555	A	...	**A**	**586**
Visual arts	343	159	A	**A**	9	**510**
Architecture	254	...	A	...	...	**254**
Photography	96	.	A	...	9	**105**
Design	413	...	...	...	...	**413**
Advertising	A	845	...	...	...	**845**
Festivals	A	5	A	...	...	**5**
Heritage:	...	289	A	...	...	**289**
Excluding nature parks	...	*216*	...	...	...	...
Nature parks	...	*73*	...	...	...	...
Libraries	.	519	A	...	...	**519**
Total	2,008	6,844	1,118	2,611	942	13,524

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. The *Value added* method was mainly used to obtain individual sub-sector GDP. For an explanation of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.
4. Please note that the totals may not add up due to rounding.

Source: *Statistics Canada.*

Table A.3

Culture GDP in Ontario, 1998

Culture sub-sectors (current $ millions)	Creation	Production	Support services	Manu-facturing	Distribution	**Total**
Written media	404	3,415	A	2,262	191	**6,271**
Film industry	265	346	A	388	272	**1,271**
Broadcasting:	62	953	A	...	388	**1,402**
Private:	...	*789*	...	...	*224*	...
Television	...	*685*	...	...	*121*	...
Radio	...	*103*	...	...	*103*	...
Public and non-commercial	...	*164*	...	...	*164*	...
Sound recording and music publishing	146	194	A	151	76	**568**
Performing arts	39	606	A	...	A	**645**
Visual arts	364	162	A	A	10	**537**
Architecture	342	...	A	...	...	**342**
Photography	96	.	A	...	10	**106**
Design	422	...	...	...	...	**422**
Advertising	A	853	...	...	...	**853**
Festivals	A	*7*	A	...	...	**7**
Heritage:	...	305	A	...	...	**305**
Excluding nature parks	...	*226*	...	...	...	...
Nature parks	...	*79*	...	...	...	...
Libraries	.	515	A	...	...	515
Total	2,141	7,354	1,235	2,802	948	14,480

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. The *Value added* method was mainly used to obtain individual sub-sector GDP. For an explanation of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.
4. Please note that the totals may not add up due to rounding.

Source: *Statistics Canada.*

Catalogue no. 81-595-MIE2004024

Table A.4

Culture GDP in Ontario, 1999

Culture sub-sectors (current $ millions)	Creation	Production	Support services	Manu-facturing	Distribution	Total
Written media	404	3,881	A	2,355	219	**6,802**
Film industry	339	368	A	431	238	**1,479**
Broadcasting:	83	1,037	A	...	400	**1,545**
Private:	...	*888*	...	...	*251*	...
Television	...	*789*	...	...	*152*	...
Radio	...	*99*	...	...	*99*	...
Public and non-commercial	...	*149*	...	...	*149*	...
Sound recording and music publishing	35	147	A	182	68	**437**
Performing arts	94	562	A	...	A	**661**
Visual arts	433	134	A	A	11	**612**
Architecture	367	...	A	...	...	**368**
Photography	160	.	A	...	11	**171**
Design	455	...	...	...	...	**396**
Advertising	A	1,074	...	...	...	**1,077**
Festivals	A	8	A	...	...	**8**
Heritage:	...	331	A	...	...	**352**
Excluding nature parks	...	*244*	...	...	...	...
Nature parks	...	*87*	...	...	...	...
Libraries	.	523	A	...	...	**446**
Total	2,370	8,054	1,418	2,968	947	15,767

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. The *Value added* method was mainly used to obtain individual sub-sector GDP. For an explanation of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.
4. Please note that the totals may not add up due to rounding.

Source: Statistics Canada.

Table A.5

Culture GDP in Ontario, 2000

Culture sub-sectors (current $ millions)	Creation	Production	Support services	Manu-facturing	Distribution	**Total**
Written media	504	4,347	A	2,773	223	**8,400**
Film industry	428	369	A	410	240	**1,732**
Broadcasting:	87	1,137	A	...	430	**1,941**
Private:	...	*957*	...	...	*249*	...
Television	...	*845*	...	...	*137*	...
Radio	...	*112*	...	...	*112*	...
Public and non-commercial	...	*180*	...	...	*180*	...
Sound recording and music publishing	54	163	A	185	64	**522**
Performing arts	19	545	A	...	A	**63***
Visual arts	404	129	A	**A**	13	**617**
Architecture	501	...	A	...	...	**534**
Photography	168	.	A	...	13	**193**
Design	499	...	...	...	...	**501**
Advertising	A	1,240	...	...	...	**1,320**
Festivals	A	8	A	...	...	**9**
Heritage:	...	336	A	...	...	**423**
Excluding nature parks	...	*241*	...	...	...	...
Nature parks	...	*95*	...	...	...	...
Libraries	.	507	A	...	...	**496**
Total	2,665	8,781	1,740	3,368	984	17,539

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. The *Value added* method was mainly used to obtain individual sub-sector GDP. For an explanation of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.
4. Please note that the totals may not add up due to rounding.

Source: *Statistics Canada.*

Table A.6

Culture GDP in Ontario, 2001

Culture sub-sectors (current $ millions)	Creation	Production	Support services	Manu-facturing	Distribution	Total
Written media	553	4,481	A	3,027	220	**9,095**
Film industry	489	377	A	389	245	**1,848**
Broadcasting:	96	1,234	A	...	466	**2,153**
Private:	...	*1,037*	...	...	*270*	...
Television	...	*911*	...	...	*144*	...
Radio	...	*126*	...	...	*126*	...
Public and non-commercial	...	*196*	...	...	*196*	...
Sound recording and music publishing	47	159	A	188	61	**518**
Performing arts	26	560	A	...	...	**667**
Visual arts	327	116	A	...	13	**537**
Architecture	451	...	A	...	...	**484**
Photography	153	.	A	...	13	**178**
Design	512	...	...	...	...	**512**
Advertising	A	1,227	...	...	...	**1,367**
Festivals	A	11	A	...	...	**12**
Heritage:	...	355	A	...	...	**449**
Excluding nature parks	...	*251*	...	...	...	...
Nature parks	...	*103*	...	...	...	...
Libraries	.	506	A	...	...	**517**
Total	2,655	9,025	1,628	3,604	1,017	17,929

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. The *Value added* method was mainly used to obtain individual sub-sector GDP. For an explanation of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.
4. Please note that the totals may not add up due to rounding.

Source: *Statistics Canada.*

Appendix B: Employment in culture sub-sectors

Table B.1

Culture employment in Ontario, 1996

Culture sub-sectors	Creation	Production	Support services	Manu-facturing	Distribution	**Total**
Written media	3,341	31,683	A	28,866	6,023	**69,913**
Film industry	2,518	4,421	A	2,889	5,566	**15,394**
Broadcasting:	844	9,408	A	...	5,081	**15,333**
Private:	...	*7,368*	...	...	*2,882*	...
Television	...	*5,888*	...	...	*1,402*	...
Radio	...	*1,481*	...	...	*1,481*	...
Public and non-commercial	...	*2,199*	...	...	*2,199*	...
Sound recording and music publishing	866	2,040	A	1,010	1,558	**5,473**
Performing arts	755	10,050	A	...	A	**10,805**
Visual arts	4,194	1,536	A	A	459	**6,189**
Architecture	4,444	...	A	...	...	**4,444**
Photography	4,772	.	A	...	459	**5,231**
Design	20,054	...	...	...	...	**20,054**
Advertising	A	17,365	...	...	...	**17,365**
Festivals	A	356	A	...	...	**356**
Heritage:	...	10,377	A	...	...	**10,377**
Excluding nature parks	...	*7,575*	...	...	...	...
Nature parks	...	*2,802*	...	...	...	...
Libraries	.	11,142	A	...	...	**11,142**
Total	41,788	98,377	23,174	32,764	19,146	215,250

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. For an explanation and description of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.

Source: *Statistics Canada.*

Table B.2

Culture employment in Ontario, 1997

Culture sub-sectors	Creation	Production	Support services	Manu-facturing	Distribution	**Total**
Written media	5,450	33,610	A	28,931	6,125	**74,117**
Film industry	2,505	5,846	A	3,159	5,927	**17,436**
Broadcasting:	916	8,043	A	...	4,697	**13,656**
Private:	...	*6,097*	...	...	*2,751*	...
Television	...	*4,644*	...	...	*1,298*	...
Radio	...	*1,453*	...	...	*1,453*	...
Public and non-commercial	...	*1,947*	...	...	*1,947*	...
Sound recording and music publishing	706	3,498	A	915	1,451	**6,570**
Performing arts	433	8,566	A	...	A	**8,999**
Visual arts	2,699	2,069	A	A	333	**5,101**
Architecture	3,701	...	A	...	...	**3,701**
Photography	2,741	.	A	...	333	**3,074**
Design	20,287	...	...	...	...	**20,287**
Advertising	A	22,153	...	...	...	**22,153**
Festivals	A	351	A	...	...	**351**
Heritage:	...	10,455	A	...	...	**10,455**
Excluding nature parks	...	*7,620*	...	...	...	...
Nature parks	...	*2,835*	...	...	...	...
Libraries	.	11,087	A	...	...	**11,087**
Total	39,438	105,679	20,613	33,005	18,866	217,601

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. For an explanation and description of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.

Source: *Statistics Canada.*

Table B.3

Culture employment in Ontario, 1998

Culture sub-sectors	Creation	Production	Support services	Manu-facturing	Distribution	**Total**
Written media	5,207	26,692	A	30,563	4,510	**66,972**
Film industry	2,321	9,148	A	3,966	7,237	**22,671**
Broadcasting:	1,365	8,876	A	...	4,575	**14,816**
Private:	...	*7,042*	...	...	*2,741*	...
Television	...	*5,563*	...	...	*1,262*	...
Radio	...	*1,479*	...	...	*1,479*	...
Public and non-commercial	...	*1,834*	...	...	*1,834*	...
Sound recording and music publishing	1,161	4,426	A	1,079	1,082	**7,747**
Performing arts	809	6,482	A	...	A	**7,291**
Visual arts	3,841	3,484	A	A	359	**7,684**
Architecture	4,641	...	A	...	...	**4,641**
Photography	1,327	.	A	...	359	**1,686**
Design	19,713	...	...	...	...	**19,713**
Advertising	A	20,619	...	...	...	**20,619**
Festivals	A	450	A	...	...	**450**
Heritage:	...	10,863	A	...	...	**10,863**
Excluding nature parks	...	*7,848*	...	...	...	...
Nature parks	...	*3,015*	...	...	...	...
Libraries	.	11,076	A	...	...	**11,076**
Total	40,385	102,116	22,879	35,607	18,121	219,108

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. For an explanation and description of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.

Source: *Statistics Canada.*

Table B.4

Culture employment in Ontario, 1999

Culture sub-sectors	Creation	Production	Support services	Manu-facturing	Distribution	**Total**
Written media	4,888	28,836	A	29,448	5,050	**68,222**
Film industry	4,060	9,988	A	4,023	8,719	**26,789**
Broadcasting:	2,133	10,415	A	A	4,832	**17,380**
Private:	...	*8,374*	...	...	*2,791*	...
Television	...	*6,878*	...	...	*1,295*	...
Radio	...	*1,496*	...	...	*1,496*	...
Public and non-commercial	...	*2,041*	...	...	*2,041*	...
Sound recording and music publishing	343	3,748	A	1,977	1,416	**6,495**
Performing arts	1,001	6,638	A	...	...	**7,639**
Visual arts	3,615	2,611	A	...	366	**6,592**
Architecture	7,434	...	A	...	...	**7,434**
Photography	4,443	.	A	...	366	**4,809**
Design	22,239	...	...	...	...	**22,239**
Advertising	A	18,744	...	...	...	**18,744**
Festivals	A	489	A	...	...	**489**
Heritage:	...	11,116	A	...	...	**11,116**
Excluding nature parks	...	*7,830*	...	...	...	...
Nature parks	...	*3,286*	...	...	...	...
Libraries	.	11,033	...	...	...	**11,033**
Total	50,156	103,618	23,160	34,459	20,747	232,139

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. For an explanation and description of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.

Source: *Statistics Canada.*

Table B.5

Culture employment in Ontario, 2000

Culture sub-sectors	Creation	Production	Support services	Manu-facturing	Distribution	**Total**
Written media	7,117	36,672	A	28,528	4,960	**77,276**
Film industry	5,987	11,301	A	4,050	12,218	**33,556**
Broadcasting:	2,672	13,728	A	...	4,886	**21,285**
Private:	...	*11,665*	...	...	*2,823*	...
Television	...	*10,174*	...	...	*1,332*	...
Radio	...	*1,491*	...	...	*1,491*	...
Public and non-commercial	...	*2,063*	...	...	*2,063*	...
Sound recording and music publishing	590	3,767	A	892	1,237	**6,486**
Performing arts	314	7,941	A	...	A	**8,255**
Visual arts	3,047	2,187	A	A	410	**5,644**
Architecture	9,865	...	A	...	...	**9,865**
Photography	3,980	.	A	...	410	**4,390**
Design	23,166	...	...	...	...	**23,166**
Advertising	A	25,964	...	...	...	**25,964**
Festivals	A	544	A	...	...	**544**
Heritage:	...	11,452	A	...	...	**11,452**
Excluding nature parks	...	*8,109*	...	...	...	...
Nature parks	...	*3,343*	...	...	...	...
Libraries	.	11,065	A	...	...	**11,065**
Total	56,738	124,620	28,033	33,470	24,120	266,981

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. For an explanation and description of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.

Source: *Statistics Canada.*

Table B.6

Culture employment in Ontario, 2001

Culture sub-sectors	Creation	Production	Support services	Manu-facturing	Distribution	Total
Written media	7,552	29,598	A	31,359	4,975	**73,485**
Film industry	5,536	11,183	A	4,153	11,332	**32,203**
Broadcasting:	1,111	15,855	A	...	4,838	**21,805**
Private:	...	*13,825*	...	...	*2,808*	...
Television	...	*12,332*	...	...	*1,315*	...
Radio	...	*1,494*	...	...	*1,494*	...
Public and non-commercial	...	*2,030*	...	...	*2,030*	...
Sound recording and music publishing	406	3,816	A	793	1,258	**6,272**
Performing arts	267	7,414	A	...	A	**7,681**
Visual arts	2,617	1,998	A	A	419	**5,034**
Architecture	7,903	...	A	...	...	**7,903**
Photography	4,672	.	A	...	419	**5,091**
Design	21,256	...	...	...	...	**21,256**
Advertising	A	24,322	...	...	...	**24,322**
Festivals	A	605	A	...	...	**605**
Heritage:	...	11,635	A	...	...	**11,635**
Excluding nature parks	...	*8,142*	...	...	...	...
Nature parks	...	*3,494*	...	...	...	...
Libraries	.	11,046	A	...	...	**11,046**
Total	51,320	117,472	24,779	36,304	23,242	253,117

Notes:

A identifies various categories that are combined with other categories

. not available for any reference period

... not applicable

1. For an explanation and description of the methodology involved in estimating the numbers, see Appendix C.
2. The breakdown of various culture sub-sectors are shown in italics.
3. Festival data are derived from Department of Canadian Heritage and only includes those festivals which receive funding from the Culture Initiatives Program. Hence, these data are not a comprehensive estimate of festival sector in Canada. Therefore, the festival estimates should be used with caution.

Source: *Statistics Canada.*

Appendix C: Methodology

Measurement of Gross Domestic Product (GDP):

Value Added method: This method calculates GDP by measuring the gross value of production of each firm and subtracting each firm's costs of production in the form of its purchases from other firms. The *Value added* method is mainly used to calculate the economic impact at the culture sub-sector level. Data for this method are mainly obtained from the *System of National Accounts (SNA)* using the *North American Industry Classification System (NAICS)*. Where data from the *SNA* are not available, we use surveys to measure the GDP.

Employment Statistics

Employment statistics are mainly obtained using the *Labour Force Survey (LFS)* based on the NAICS and the Standard Occupational Classification (SOC) system. Where data from LFS are not available, various surveys are used to measure the employment counts. It should be pointed out that the economic contribution associated with culture workers who work in non-culture industries are not estimated since these jobs are in industries clearly outside the framework. Similarly, non-culture workers who are part of the culture industry are included in the employment counts. The contributions of volunteer workers are not estimated.

Surveys used:

Labour Force Survey (LFS) and the data from the *System of National Accounts (SNA)* are mainly used to estimate GDP and employment contributions of the culture sector in Ontario. Where data from these are not available, other surveys are used to obtain the missing information. These surveys include Statistics Canada's *Film, Video and Audio-Visual Production Survey, Motion Picture Laboratory Operations and Production and Post-Production Services Survey, Film, Video and Audio Visual Distribution, Motion Picture Theatres Survey, Survey of Heritage Institutions, Annual Survey of Manufacturers, Annual Wholesale Trade Survey, Annual Retail Trade Survey, Radio and Television Broadcasting Survey* and the *Annual Survey of Service Industries: Specialized Design*. Some external sources were also used to collect data for some of the culture sub-sectors, such as the National Core Library Statistics Program (NCLSP) for the *Libraries* sub-sector and data from the Department of Canadian Heritage for the *Festival* sub-sector.

Cultural sub-sector (culture industries)

1. Written media

1.1 Written media creation: includes the activities of establishments primarily engaged in NAICS[15] 71151 (Independent Artists, Writers and Performers) cross-tablulated with the following occupations: SOC F021 (Writers), SOC F022 (Editors), SOC F023 (Journalists) and SOC F025 (Translators, Terminologists and Interpreters).[16] This is done in order to capture only the *Written media creation* activities of establishments engaged in NAICS 71151, i.e. these occupational categories captures the part of NAICS 71151 related only to the *Written media creation* category.

Data sources:

- Labour Force Survey (LFS)
- CANSIM table 379-0017

Methodology:

- *Contribution to GDP:* The GDP figures are estimated from the *CANSIM table* for NAICS 71151 for the occupational categories: SOC F021, F022, F023 and F025. Note: Since provincial breakdown for the required NAICS are not available, the provincial allocation of NAICS 71 (Arts, entertainment and recreation) is applied to the national estimate to obtain the required provincial breakdowns.
- *Contribution to employment:* The *LFS* provides employment estimates of NAICS 71151 for the occupational categories: SOC F021, F022, F023 and F025.

1.2 Written media production: includes the activities of establishments primarily engaged in NAICS 51111 (Newspaper Publishers), NAICS 51112 (Periodical Publishers), NAICS 51113 (Book Publishers), NAICS 51119 (Other Publishers) and NAICS 51611 (Internet Publishing and Broadcasting).

Data sources:

- Labour Force Survey (LFS)
- CANSIM table 379-0017

Methodology:

- *Contribution to GDP:* Since provincial breakdown in not available, the provincial allocation of (NAICS 511 and NAICS 514) is applied to the national figures for this category. For the national figures, since data for the required individual NAICS categories are not available, we use the data for NAICS 511 (Publishing Industries) from the *CANSIM table*, which includes all the above required NAICS with two extra categories NAICS 51114 (Directory and Mailing List Publishers) and NAICS 5112 (Software Publishers). To remove NAICS 5112, we use the percentage of employment in NAICS 511 from NAICS 5112 and use this proportion to remove the NAICS 5112 from the NAICS 511.
- *Contribution to employment:* is derived from the *Labour Force Survey* for NAICS 5111 (Newspaper, Periodical, Book and Directory Publishers) which includes the required NAICS category with an extra category NAICS 51114 (Directory and Mailing List Publishers).

1.3 Written media manufacturing: includes the activities of establishments primarily engaged in NAICS 323113 (Printing – Commercial screen printing), NAICS 323114 (Printing – Quick printing), NAICS 323115 (Printing – Digital printing), NAICS 323119 (Other Printing) and NAICS 32312 (Support activities for Printing). Since individual data for NAICS 323113, NAICS 323114, NAICS 323115 and NAICS 323119 is not available, we use NAICS 32311 (Printing), which includes all the NAICS categories with an extra category of NAICS 323116 (Manifold Business Forms Printing).

Data source: Annual Survey of Manufacturers (Cansim table 301-0003).

Methodology:

- *Contribution to GDP:* refers to the total manufacturing value added for NAICS 32311 and NAICS 32312 from the *Annual Survey of Manufacturers*. Manufacturing value added refers to the value added from manufacturing activity only.
- *Contribution to employment:* refers to the production workers from the *Annual Survey of Manufacturers* (number of production workers for NAICS 32311 and NAICS 32312).

1.4 Written media distribution: includes the activities of establishments primarily engaged in NAICS 41442 (Distributors – Book, Periodical and Newspaper Wholesalers) and NAICS 45121 (Retail – Book Stores and Newspaper Wholesalers – Distributors). Note: Since provincial breakdown for the required NAICS are not available, the provincial allocation of NAICS 51 (Wholesale trade) and NAICS 44-45 (Retail trade) are applied to the national estimates (for wholesale and retail, respectively) to obtain the provincial breakdown.

Data sources:

- Annual Wholesale Trade Survey
- Annual Retail Trade Survey
- CANSIM table 379-0025
- CANSIM table 282-0008

Methodology:

- *Contribution to GDP:* Since GDP data for NAICS 41442 and NAICS 45121 are not available, we calculate the proportion of total wholesale operating revenues in Canada (total wholesale operating revenues from all NAICS categories) from NAICS 451442 and NAICS 45121. We then apply this proportion to the GDP from total wholesale trade in Canada to derive our estimate. This step is repeated to calculate GDP for retail trade for NAICS 45121. Wholesale and retail operating revenues are obtained from the *Annual Wholesale Trade Survey* and the *Annual Retail Trade Survey*, respectively. Total wholesale and retail GDP numbers are derived from the *CANSIM table 379-0025*.
- *Contribution to employment:* Since employment data for NAICS 41442 and NAICS 45121 are not available, we calculate the proportion of total wholesale operating revenues in Canada (total wholesale operating revenues from all NAICS categories) from NAICS 451442 and NAICS 45121. We then apply this proportion to the employment from total wholesale trade in Canada to derive our estimate. This step is repeated to calculate employment for retail trade for NAICS 45121. Wholesale and retail operating revenues are obtained

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from the *Annual Wholesale Trade Survey* and the *Annual Retail Trade Survey*, respectively. Total wholesale and retail GDP numbers are derived from the *CANSIM table 282-0008*.

1.5 Written media support services: includes the activities of establishments primarily engaged in NAICS 61161 (Fine Arts Schools), NAICS 71141 (Agents and Managers for Artists, Athletes, Entertainers and Other Public Figures), NAICS 81321 (Grant Making and Giving Services), NAICS 81331 (Social Advocacy Organizations) and NAICS 8139 (Business, Professional, Labour and other Membership Organizations). Since many of the NAICS categories for support services are shared by various culture sub-sectors, we combine them all as total GDP from *culture support services*.

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* is derived from the *CANSIM table* for NAICS 81321, 81331, 8139 and 71141. GDP data for NAICS 61161 are not available.
- *Contribution to employment:* is derived from the *LFS* for NAICS 81321, 81331, 8139 and 71141. Employment data for NAICS 61161 are not available.

2. Film industry

2.1 Film industry creation: includes the activities of establishments primarily engaged in NAICS 71151 (Independent Artists, Writers and Performers) cross-tabulated with the following occupation categories: SOC F031 (Producers, Directors, Choreographers and related occupation, SOC F035 (Actors), SOC F122 (Film and video operators), SOC F125 (Audio and Video Recording Technicians), SOC F126 (Other Technical Occupations in Motion Pictures) and SOC F127 (Support and Assisting occupations in Motion Pictures). This is done in order to capture only the *Film industry creation* activities of establishments engaged in NAICS 71151, i.e. these occupational categories captures the part of NAICS 71151 related only to the *Film industry creation* category.

Data sources:

- Labour Force Survey (LFS)
- CANSIM table 379-0017

Methodology:

- *Contribution to GDP:* The GDP figure is derived from the *CANSIM table* for NAICS 71151 for the following occupations categories: SOC F031, F035, F122, F125, F126 and F127. Note: Since provincial breakdown for the required NAICS are not available, the provincial allocation of NAICS 71 (Arts, entertainment and recreation) is applied to the national estimate to obtain the required provincial breakdowns.
- *Contribution to employment:* The *LFS* provides employment estimates of NAICS 71151 for the following occupations categories: SOC F031, F035, F122, F125, F126 and F127.

2.2 Film industry production: includes the activities of establishments primarily engaged in NAICS 51211 (Motion Picture and Video Production). We use the data from the *Film, Video and Audio-Visual Production Survey* as a proxy for the NAICS category in order to calculate the contribution to GDP and the employment counts.

Data source: Film, Video and Audio-Visual Production Survey

Methodology:

- *Contribution to GDP: Net operating surplus (loss) and net income of unincorporated business + Salaries, Wages and Supplementary Labour Income + Depreciation* from the *Film, Video and Audio-Visual Production Survey.*
- *Contribution to employment:* is obtained from the *Film, Video and Audio-Visual Production Survey.*

2.3 Film industry manufacturing: includes the activities of establishments primarily engaged in NAICS 51219 (Post-Production and Other Motion Picture and Video Industries) and NAICS 33461 (Manufacturing and Reproducing Magnetic and Optical Media). The data from the *Motion Picture Laboratory Operations and Post Production Services Survey* are used as proxy for NAICS 51219 for GDP and employment. NAICS 33461 is allocated to both *Film industry manufacturing* and *Sound recording and music publishing manufacturing*; hence, employment and GDP is allocated equally to these categories.

Data sources:

- Annual Survey of Manufacturers
- Motion Picture Laboratory Operations and Production and Post Production Services Industry Survey.

Methodology:

- *Contribution to GDP: Net operating surplus (loss) and net income of unincorporated business + Salaries, Wages and Supplementary Labour Income Depreciation* from the *Motion Picture Laboratory Operation and Production and Post Production Services Industry Survey* for NAICS 51219. GDP for NAICS 33461 refers to the manufacturing value added obtained from the *Annual Survey of Manufacturers.*
- *Contribution to employment:* is obtained from the *Motion Picture Laboratory Operation and Production and Post Production Services Industry Survey.* Employment for NAICS 33461 refers to the production workers obtained from the *Annual Survey of Manufacturers.*

2.4 Film industry distribution: includes the activities of establishments primarily engaged in NAICS 51212 (Motion Picture and Video Distribution), NAICS 41445 (Video Cassette Wholesalers), NAICS 45122 (Pre-recorded Tape, Compact Disc and Record Stores), NAICS 51213 (Motion Picture and Video exhibition) and NAICS 53223 (Video Tape and Disc Rental). Since the NAICS 45122 is also included in *Sound recording and music publishing distribution*, we allocate the employment and GDP equally to *Film industry distribution* and *Sound recording and music publishing distribution* categories. Note: Since provincial breakdown for the required NAICS are not available, the provincial allocation of NAICS 51 (Wholesale trade) and NAICS 44-45 (Retail trade) are applied to the national figures (for wholesale and retail, respectively) to obtain provincial estimates.

Data sources:

- Film, Video and Audio Visual Distribution Survey
- Annual Wholesale Trade Survey
- Annual Retail Trade Survey
- Motion Picture Theatres Survey
- CANSIM table 379-0017
- CANSIM table 282-0008

Methodology:

- *Contribution to GDP:* To calculate GDP for NAICS 45122, we calculate the proportion of all wholesale operating revenues in Canada (total wholesale operating revenues from all NAICS categories) from NAICS 45122. We then apply this proportion to the GDP from total wholesale trade in Canada to derive our estimate. This step is repeated to calculate GDP for retail trade for NAICS 45122. Wholesale and retail operating revenues are obtained from the *Annual Wholesale Trade Survey* and the *Annual Retail Trade Survey*, respectively. Total wholesale and retail GDP numbers are derived from the *CANSIM table 379-0017*. The *Motion Picture Theatres Survey* is used as proxy for the NAICS 51213 to calculate the GDP: *Net operating surplus (loss) and net income of unincorporated business + Salaries, Wages and Supplementary Labour Income + Depreciation.* Similarly, *Film, Video and Audio Visual Distribution Survey* is used to calculate GDP for NAICS 51212 and NAICS 41445: *Net operating surplus (loss) and net income of unincorporated business + Salaries, Wages and Supplementary Labour Income + Depreciation.*
- *Contribution to employment:* To calculate employment for NAICS 45122, we calculate the proportion of all wholesale operating revenues in Canada (total wholesale operating revenues from all NAICS categories) from NAICS 45122. We then apply this proportion to the employment from total wholesale trade in Canada to derive our estimate. This step is repeated to calculate employment for retail trade for NAICS 45122. Wholesale and retail operating revenues are obtained from the *Annual Wholesale Trade Survey* and the *Annual Retail Trade Survey*, respectively. Total wholesale and retail GDP numbers are derived from the *CANSIM table 282-0008.*

  The *Motion Picture Theatre Survey* is used as proxy to calculate employment for NAICS 51213. Similarly, *Film, Video and Audio Visual Distribution Survey* is used as a proxy to calculate employment for NAICS 51212 and NAICS 41445.

2.5 *Film industry support services:* includes the activities of establishments primarily engaged in NAICS 61161 (Fine Arts Schools), NAICS 71141 (Agents and Managers for Artists, Athletes, Entertainers and Other Public Figures), NAICS 81321 (Grant Making and Giving Services), NAICS 81331 (Social advocacy Organizations) and NAICS 8139 (Business, Professional, Labour and Other Membership Organizations). Since many of the NAICS categories for support services are shared by various culture sub-sectors, we combine them all as GDP from *culture support services.* Employment and GDP data for NAICS 61161 are not available.

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* is derived from the *CANSIM table* for NAICS 81321, 81331, 8139 and 71141.
- *Contribution to employment:* is derived from the *LFS* for NAICS 81321, 81331, 8139 and 71141.

3. Broadcasting

3.1 Broadcasting creation: includes the activities of establishments primarily engaged in NAICS 71151 (Independent Artists, Writers and Performers), cross-tablulated with the following occupation categories: SOC F124 (Broadcast Technicians), SOC F126 (Other Technical Occupation in Pictures, Broadcasting and the Performing Arts), SOC F131 (Announcers and Other Broadcasters), SOC F127 (Support and Assisting Occupations in Motion Pictures, Broadcasting and the Performing Arts). This is done in order to capture only the *Broadcasting creation* activities of establishments engaged in NAICS 71151, i.e. these occupational categories captures the part of NAICS 71151 related only to the *Broadcasting creation* category. Since SOC F126 and SOC F127 are already included in *Film industry creation*, these occupational categories are not included in *Broadcasting creation* in order to avoid double-counting.

Data sources:

- Labour Force Survey (LFS)
- CANSIM table 379-0017

Methodology:

- *Contribution to GDP:* The GDP figures are computed from the *CANSIM table* for NAICS 71151 for the following occupations categories: SOC F124, F126, F127 and F131. Note: Since provincial breakdown for the required NAICS are not available, the provincial allocation of NAICS 71 (Arts, entertainment and recreation) is applied to the national estimate to obtain the required provincial breakdowns.
- *Contribution to employment:* The *LFS* provides estimates of NAICS 71151 for the following occupations categories: SOC F124, F126, F127 and F131.

3.2 Broadcasting production: includes the activities of establishments primarily engaged in NAICS 51511 (Radio Broadcasting), NAICS 51512 (Television Broadcasting) and NAICS 5152 (Pay and Specialty Television) and NAICS 51611 (Internet Publishing and Broadcasting). We use the *Radio and Television Broadcasting Survey* as proxy for NAICS 51311 and NAICS 51312. We use the data from the *SNA* for NAICS 5152. Since NAICS 51511 and NAICS 51512 are also included in *Broadcasting Distribution*, we allocate the GDP and employment numbers for these NAICS categories equally to *Broadcasting production* and *Broadcasting distribution* categories.

Data sources:

- Radio and Television Broadcasting Survey
- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP: Salaries, Wages and Supplementary Labour Income + Corporation Profits before Taxes + Depreciation* from the *Radio and Television Broadcasting Survey* for NAICS 51511 and NAICS 51512. GDP data for NAICS 5152 are obtained from the *CANSIM table.*
- *Contribution to employment:* is obtained from the *Radio and Television Broadcasting Survey* for NAICS 51511 and NAICS 51512. Employment data for NAICS 5152 are obtained from the *LFS.*

3.3 Broadcasting manufacturing: Not applicable.

3.4 Broadcasting distribution: includes the activities of establishments primarily engaged in NAICS 51511 (Radio Broadcasting), NAICS 51512 (Television Broadcasting) and NAICS 5175 (Cable and Other Program Distribution). Since these NAICS categories are also included in *Broadcasting production*, we allocate the GDP and employment numbers for these NAICS categories equally to the *Broadcasting production* and *Broadcasting distribution* categories.

3.5 Broadcasting support services: includes the activities of establishments primarily engaged in NAICS 61161 (Fine Arts Schools), NAICS 71141 (Agents and Managers for Artists, Athletes, Entertainers and Other Public Figures), NAICS 81321 (Grant Making and Giving Services), NAICS 81331 (Social Advocacy Organizations) and NAICS 8139 (Business, Professional, Labour and other Membership Organizations). Since many of the NAICS categories for support services are shared by various culture sub-sectors, we combine them all as total GDP from *culture support services.* Employment and GDP data for NAICS 61161 are not available.

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* for NAICS 61161, 71141, 81321, 81331 and 8139 are derived from the *CANSIM table.*
- *Contribution to employment:* for NAICS 61161, 71141, 81321, 81331 and 8139 are derived from the *LFS.*

4. Sound recording and music publishing

4.1 Sound recording and music publishing creation: includes the activities of establishments primarily engaged in NAICS 71151 (Independent Artists, Writers and Performers), cross-tablulated with the following occupation categories: SOC F031 (Producers, Directors, Choreographers and Related Occupations), SOC F032 (Conductors, Composers and Arrangers), SOC F033 (Musicians and Singers) and SOC F125 (Audio and Video Recording Technicians). This is done in order to capture only the *Sound recording and music publishing creation* activities of establishments engaged in NAICS 71151, i.e. these occupational categories captures the part of NAICS 71151 related only to the *Sound recording and music publishing creation* category. This category also includes the activities of establishments engaged in NAICS 71113 (Musical Groups and Artists) for which data are not available.

Since SOC F031 and SOC F125 are already included in *Broadcasting creation*, these occupational categories are not included in *Sound recording and music publishing creation* in order to avoid double-counting.

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* The GDP figures are derived from the *CANSIM table* for NAICS 71151 for the following occupations categories: SOC F031, F032, F033 and F125. Note: Since provincial breakdown for the required NAICS are not available, the provincial allocation of NAICS 71 (Arts, entertainment and recreation) is applied to the national estimate to obtain the required provincial breakdowns.
- *Contribution to employment:* The *LFS* provides estimates of NAICS 71151 for the following occupations categories: SOC F031, F032, F033 and F125.

4.2 Sound recording and music publishing production: includes the activities of establishments primarily engaged in NAICS 51221 (Record Production) and NAICS 51222 (Integrated Record Production and Distribution), NAICS 7113 (Promoters of Presenting Arts, Sports and Similar Events) and NAICS 51224 (Sound Recording Studios).

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* Since data for the required individual NAICS categories are not available, we use the data for NAICS 5122 (Sound Recording Industries) from the *CANSIM table*, which includes all the required NAICS categories (NAICS 51221, NAICS 51222, NAICS 51223 and NAICS 51224) with two extra categories NAICS 51223 (Music Publishers) and NAICS 51229 (Other Sound Recording Industries). Since GDP data for NAICS 7113 are not available, we use the percentage of employed workers for NAICS 71 from NAICS 7113 and apply this proportion to the GDP from NAICS 71. Note: Since provincial breakdowns for the required NAICS are not available, the provincial allocation of NAICS 512 (Motion pictures and sound recording industries) is applied to the national estimates to obtain the required provincial breakdown.
- *Contribution to employment:* is derived from the *LFS* for NAICS 5122 and NAICS 7113.

4.3 Sound recording and music publishing manufacturing: includes the activities of establishments primarily engaged in NAICS 33461 (Manufacturing and Reproducing Magnetic and Optical Media), NAICS 51222 (Integrated Record Production/Distribution) and NAICS 512230 (Music Publishers – Publishing and Printing Combined). Data for NAICS 51222 and NAICS 512230 are already included in the *Sound recording and music publishing production* category. NAICS 33461 is allocated to both *Film industry manufacturing* and *Sound recording and music publishing manufacturing*, hence GDP and employment is allocated equally to these two categories.

Data source: Annual Survey of Manufacturers.

Methodology:

- *Contribution to GDP:* refers to the total manufacturing value added for NAICS 33461 obtained from the *Annual Survey of Manufacturers.*
- *Contribution to employment:* refers to the production workers for NAICS 33461 obtained from the *Annual Survey of Manufacturers.*

4.4 Sound recording and music publishing distribution: includes the activities of establishments primarily engaged in NAICS 41444 (Sound Recording Wholesalers), NAICS 45122 (Retail – Pre-Recorded Tape, Compact Disc and Record Stores and NAICS 51222 (Integrated Record Production and Distribution). Employment and GDP data for NAICS 51222 are included in the *Sound recording and music publishing production* category. Since the NAICS 45122 is included for both *Film industry distribution* and *Sound recording and music publishing distribution*, we allocate the GDP and employment equally to these two categories. Note: Since provincial breakdowns for the required NAICS are not available, the provincial allocation of NAICS 51 (Wholesale trade) and NAICS 44-45 (Retail trade) are applied to the national estimates (wholesale and retail, respectively) to obtain the respective provincial breakdown.

Data sources:

- Annual Wholesale Trade Survey
- Annual Retail Trade Survey
- CANSIM table 379-0017
- CANSIM table 282-0008

Methodology:

- *Contribution to GDP:* Since GDP data for NAICS 41444 are not available, we calculate the proportion of total wholesale operating revenues in Canada (total wholesale operating revenues from all NAICS categories) from NAICS 41444. We then apply this proportion to the GDP from total wholesale trade in Canada to derive our estimate. This step is repeated to calculate GDP for retail trade for NAICS 45122. Wholesale and retail operating revenues are obtained from the *Annual Wholesale Trade Survey* and the *Annual Retail Trade Survey*, respectively. Total wholesale and retail GDP numbers are derived from the CANSIM table 379-0017.
- *Contribution to employment:* Since employment data for NAICS 41444 are not available, we calculate the proportion of total wholesale operating revenues in Canada (total wholesale operating revenues from all NAICS categories) from NAICS 41444. We then apply this proportion to the employment from total wholesale trade in Canada to derive our estimate. This step is repeated in order to calculate employment for retail trade for NAICS 45122. Wholesale and retail operating revenues are obtained from the *Annual Wholesale Trade Survey* and the *Annual Retail Trade Survey*, respectively. Total wholesale and retail employment numbers are derived from the CANSIM table 282-0008.

4.5 Sound recording and music publishing support services: includes the activities of establishments primarily engaged in NAICS 61161 (Fine Arts Schools), NAICS 71141 (Agents and Managers for Artists, Athletes, Entertainers and Other Public Figures), NAICS 81321 (Grant Making and Giving Services), NAICS 81331 (Social Advocacy Organizations), NAICS 8139 (Business, Professional, Labour

and other Membership Organizations) and NAICS 45114 (Musical Instruments and Supplies Stores). Since many of the NAICS categories for support services are shared by various culture sub-sectors, we combine them all as total GDP from *culture support services*. Employment and GDP for NAICS 61161 and NAICS 45114 are not available.

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* for NAICS 81321, 81331, 8139 and 71141 are derived from the *CANSIM table.*
- *Contribution to employment:* for NAICS 81321, 81331, 8139 and 71141 are derived from the *LFS.*

5. Performing arts

5.1 Performing arts creation: includes the activities of establishments primarily engaged in NAICS 71151 (Independent Artists, Writers and Performers), cross-tabulated with the following occupation categories: SOC F031 (Producers, Directors, Choreographers and Related Occupations), SOC F032 (Conductors, Composers and Arrangers), SOC F033 (Musicians and Singers), SOC F034 (Dancers) and SOC F035 (Actors). This is done in order to capture only the *Performing arts creation* activities of establishments engaged in NAICS 71151, i.e. these occupational categories captures the part of NAICS 71151 related only to *Performing arts creation* category. This category also includes the activities of establishments engages in NAICS 71113 (Musical Groups and Artists) for which data are not available. Since SOC F031 is included in *Film industry creation* and SOC F032 and SOC F033 are included in *Sound recording and music publishing creation*, these occupational categories are not included in *Performing arts creation* in order to avoid double-counting.

Data sources:

- Labour Force Survey (LFS)
- CANSIM table 379-0017

Methodology:

- *Contribution to GDP:* The GDP figures are derived from the *CANSIM table* for NAICS 71151 for the following occupations categories: SOC F031, F032, F033, FOC 034 and F035. Note: Since provincial breakdown for the required NAICS are not available, the provincial allocation of NAICS 71 (Arts, entertainment and recreation) is applied to the national estimate to obtain the required provincial breakdowns.
- *Contribution to employment:* The *LFS* provides estimates of NAICS 71151 for the following occupations categories: SOC F031, F032, F033, FOC 034 and F035.

5.2 Performing arts production: includes the activities of establishments primarily engaged in NAICS 71111 (Theatre Companies and Dinner Theatres), NAICS 71112 (Dance Companies), NAICS 71113 (Musical Groups and Artists) and NAICS 71119

(Other Performing Arts) and NAICS 71131 (Live Theatres and Other Performing Arts Producers (Presenters) with Facilities).

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* for NAICS 71111, 71112, 71119 and 711311 are derived from the *CANSIM table*. Note: Since provincial breakdown for the required NAICS are not available, the provincial allocation of NAICS 71 (Arts, entertainment and recreation) is applied to the national estimate to obtain the required provincial breakdowns.
- *Contribution to employment:* for NAICS 71111, 71112, 71119 and 711311 are derived from the *LFS*.

5.3 Performing arts manufacturing: Not applicable.

5.4 Performing arts distribution: includes the activities of establishments primarily engaged in NAICS 711321 (Performing Arts Promoters (Presenters) Without Facilities). This NAICS category is included in *Performing arts production.*

5.5 Performing arts support services: includes the activities of establishments primarily engaged in NAICS 45114 (Musical Instruments and Supplies Stores), NAICS 61161 (Fine Arts Schools), NAICS 71141 (Agents and Managers for Artists, Athletes, Entertainers and Other Public Figures), NAICS 81321 (Grant Making and Giving Services), NAICS 81331 (Social Advocacy Organizations) and NAICS 8139 (Business, Professional, Labour and Other Membership Organizations). Since many of the NAICS categories for support services are shared by various culture sub-sectors, we combine them all as total GDP from *culture support services*. Employment and GDP for NAICS 61161 and NAICS 45114 is not available.

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* for NAICS 81321, 81331, 8139, 71141 and 7113 are derived from the *CANSIM table.*
- *Contribution to employment:* for NAICS 81321, 81331, 8139, 71141 and 7113 are derived from the *LFS.*

6. Visual arts

6.1 Visual arts creation: includes the activities of establishments primarily engaged in NAICS 71151 (Independent Artists, Writers and Performers), cross-tabulated with the following occupation category: SOC F036 (Painters, Sculptors and Other Visual Artists). This is done in order to capture only the *Visual arts creation* activities of establishments engaged in NAICS 71151, i.e. these occupational categories captures the part of NAICS 71151 related to *Visual arts creation*.

Data sources:

- Labour Force Survey (LFS)
- CANSIM table 379-0017

Methodology:

- *Contribution to GDP:* The GDP figures are derived from the *CANSIM table* for NAICS 71151 for the following occupation category: SOC F036. Note: Since provincial breakdown for the required NAICS are not available, the provincial allocation of NAICS 71 (Arts, entertainment and recreation) is applied to the national estimate to obtain the required provincial breakdowns.
- *Contribution to employment:* The *LFS* provides estimates of NAICS 71151 for the following occupation category: SOC F036.

6.2 Visual arts production: includes the activities of establishments primarily engaged in NAICS 32711 (Pottery, Ceramics and Plumbing Fixtures Manufacturing)

Data sources:

- Labour Force Survey (LFS)
- CANSIM table 379-0017

Methodology:

- *Contribution to GDP:* The GDP figures are computed from the *CANSIM table* for NAICS 3271 which includes the required category (NAICS 32711) but also include NAICS 32712 (Clay Building Material and Refractory Manufacturing).
- *Contribution to employment:* The *LFS* provides estimates for NAICS 3271 which includes the required category (NAICS 32711) but also include NAICS 32712 (Clay Building Material and Refractory Manufacturing).

6.3 Visual arts manufacturing: includes the activities of establishments primarily engaged in NAICS 323113 (Commercial Screen Printing). This NAICS is already included in *Written media manufacturing* category.

6.4 Visual arts distribution: includes the activities of establishments primarily engaged in NAICS 45392 (Art dealers). Since NAICS 45392 is included for both *Photography distribution* and *Visual arts distribution* categories, we allocate the GDP and employment numbers for NAICS 45392 equally to these two categories. Note: Since provincial breakdowns for the required NAICS are not available, the provincial allocations of NAICS 44-45 (Retail trade) are applied to the national estimates of retail to obtain the respective provincial breakdown.

Data sources:

- Annual Retail Trade Survey
- CANSIM table 379-0017
- CANSIM table 282-0008

Methodology:

- *Contribution to GDP:* Since GDP data for NAICS 45392 are not available, we calculate the proportion of total retail operating revenues in Canada (total retail operating revenues from all NAICS categories) from NAICS 45392. We then apply this proportion to the GDP from total retail trade in Canada to derive our estimate. Retail operating revenues are obtained from the *Annual Retail Trade*

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Survey. Total wholesale and retail GDP numbers are derived from the CANSIM table 379-0017.

- *Contribution to employment:* Since employment data for NAICS 45392 are not available, we calculate the proportion of total retail operating revenues in Canada (total retail operating revenues from all NAICS categories) from NAICS 45392. We then apply this proportion to the employment from total retail trade in Canada to derive our estimate. Retail operating revenues is obtained from the *Annual Retail Trade Survey*. Total wholesale and retail employment numbers are derived from the CANSIM table 282-0008.

6.5 Visual arts support services: includes the activities of establishments primarily engaged in NAICS 61161 (Fine Arts Schools), NAICS 81321 (Grant Making and Giving Services), NAICS 81331 (Social Advocacy Organizations) and NAICS 8139 (Business, Professional, Labour and Other Membership Organizations). Since many of the NAICS categories for support services are shared by various culture sub-sectors, we combine them all as total GDP from *culture support services*. Employment and GDP data for NAICS 61161 are not available.

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* for NAICS 81321, 81331 and 8139 are derived from the *CANSIM table*.
- *Contribution to employment:* for NAICS 81321, 81331 and 8139 are derived from the *LFS*.

7. Architecture

7.1 Architecture creation: includes the activities of establishments primarily engaged in NAICS 54131 (Architectural Services) and NAICS 54132 (Landscape Architectural services), cross-tabulated with the following occupation categories: SOC C051 (Architects), SOC C052 (Landscape Architects) and SOC C151 (Architectural Technologists and Technicians). This is done to capture only the *Architecture creation* activities of establishments engaged in NAICS 54131, i.e. these occupational categories captures only the part of NAICS 54131 related to *Architecture creation*.

Data sources:

- Labour Force Survey (LFS)
- CANSIM table 379-0017

Methodology:

- *Contribution to GDP:* The GDP figures are derived from the *CANSIM table* for NAICS 54131 for the following occupation category: SOC C051, SOC C052 and SOC C151. Note: Since provincial breakdown, for the required NAICS are not available, the provincial allocation of NAICS 54 (Professional, scientific and technical services) is applied to the national estimate to obtain the required provincial breakdowns.

- *Contribution to employment:* The *LFS* provides estimates of NAICS 54131 for the following occupation category: SOC C051, SOC C052 and SOC C151.

7.2 Architecture production: Not applicable.

7.3 Architecture manufacturing: Not applicable.

7.4 Architecture distribution: Not applicable.

7.5 Architecture support services: includes the activities of establishments primarily engaged in NAICS 81321 (Grant Making and Giving Services), NAICS 81331 (Social Advocacy Organizations) and NAICS 8139 (Business, Professional, Labour and Other Membership Organizations). Since many of the NAICS categories for support services are shared by various culture sub-sectors, we combine them all as total GDP from *culture support services.*

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* for NAICS 81321, 81331 and 8139 are derived from the *CANSIM table.*
- *Contribution to employment:* for NAICS 81321, 81331 and 8139 are derived from the *LFS.*

8. Photography

8.1 Photography creation: includes the activities of establishments primarily engaged in NAICS 54192 (Photographic Services), cross-tabulated with the following occupation category: SOC F121 (Photographers). This is done to capture only the *Photography creation* activities of establishments engaged in NAICS 54192, i.e. these occupational categories captures the part of NAICS 54192 only related to the *Photography creation* category.

Data sources:

- Labour Force Survey (LFS)
- CANSIM table 379-0017

Methodology:

- *Contribution to GDP:* The GDP figures are derived from the *CANSIM table* for NAICS 5419 for the following occupation category: SOC F121. Note: Since provincial breakdown, for the required NAICS are not available, the provincial allocation of NAICS 54 (Professional, scientific and technical services) is applied to the national estimate to obtain the required provincial breakdowns.
- *Contribution to employment:* The *LFS* provides estimates of NAICS 5419 for the following occupation category: SOC F121

8.2 Photography production: includes the activities of establishments primarily engaged in NAICS 812921 (Photo Finishing Laboratories). Data for NAICS 812921 are not available.

8.3 Photography manufacturing: Not applicable.

8.4 Photography distribution: includes the activities of establishments primarily engaged in NAICS 45392 (Art dealers). Since NAICS 45392 is included for both *Photography distribution* and *Visual arts distribution* categories, we allocate the employment and GDP for this NAICS equally to these two categories. Note: Since provincial breakdowns for the required NAICS are not available, the provincial allocations of NAICS 44-45 (Retail trade) are applied to the national estimates of retail to obtain the respective provincial breakdown.

Data sources:

- Annual Retail Trade Survey
- CANSIM table 379-0017
- CANSIM table 282-0008

Methodology:

- *Contribution to GDP:* Since GDP data for NAICS 45392 are not available, we calculate the proportion of total retail operating revenues in Canada (total wholesale retail revenues from all NAICS categories) from NAICS 45392. We then apply this proportion to the GDP from total retail trade in Canada to derive our estimate. Retail operating revenues are obtained from the *Annual Retail Trade Survey*. Total wholesale and retail GDP numbers are derived from the CANSIM table 379-0017.
- *Contribution to employment:* Since employment data for NAICS 45392 are not available, we calculate the proportion of total retail operating revenues in Canada (total retail operating revenues from all NAICS categories) from NAICS 45392. We then apply this proportion to the employment from total retail trade in Canada to derive our estimate. Retail operating revenues are obtained from the *Annual Retail Trade Survey*. Total wholesale and retail employment numbers are derived from the CANSIM table 282-0008.

8.5 Photography support services: includes the activities of establishments primarily engaged in NAICS 61161 (Fine Arts Schools), NAICS 81321 (Grant Making and Giving Services), NAICS 81331 (Social Advocacy Organizations) and NAICS 8139 (Business, Professional, Labour and Other Membership Organizations). Since many of the NAICS categories for support services are shared by various culture sub-sectors, we combine them all as total GDP from *culture support services*. Employment and GDP data for NAICS 61161 are not available.

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* for NAICS 81321, 81331 and 8139 are derived from the *CANSIM table*.
- *Contribution to employment:* for NAICS 81321, 81331 and 8139 are derived from the *LFS*.

9. Design

9.1 Design creation: includes the activities of establishments primarily engaged in NAICS 54141 (Interior Design Services), NAICS 54142 (Industrial Design Services), NAICS 54143 (Graphic Design Services) and NAICS 54149 (Other Specialized Design Services).

Data sources:

- Labour Force Survey (LFS)
- Annual Survey of Service Industries: Specialized Design (CANSIM table 360-0002)

Methodology:

- *Contribution to GDP:* The GDP figures are computed from the *CANSIM table* for NAICS 5414 (Specialized Design Services), which includes NAICS 54141, 54142, 54143 and 54149. Note: Since provincial breakdown, for the required NAICS are not available, the provincial allocation of NAICS 54 (Professional, scientific and technical services) is applied to the national estimate to obtain the required provincial breakdowns.
- *Contribution to employment:* The *LFS* provides estimates of NAICS 5414 (Specialized Design Services), which includes NAICS 54141, 54142, 54143 and 54149.

9.2 Design production: Not applicable

9.3 Design manufacturing: Not applicable.

9.4 Design distribution: Not applicable.

9.5 Design support services: Not applicable

10. Advertising

10.1 Advertising creation: includes the activities of establishments primarily engaged in NAICS 54143 (Graphics Design Services) and NAICS 541899 (All Other Services Related to Advertising). NAICS 541899 is included in *Advertising production* category and NAICS 54143 is included in *Design creation* category.

10.2 Advertising production: includes the activities of establishments primarily engaged in NAICS 54181 (Advertising Agencies), NAICS 54185 (Display Advertising), NAICS 54186 (Direct Mail Advertising) and NAICS 541891 (Specialized Advertising Distribution).

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* Since data are not available at the disaggregated NAICS 5-digit levels, hence the contribution to GDP is calculated using an estimate of GDP for NAICS 5418 (which includes NAICS 54181, 54182, 54183, 54184, 54185, 54186, 54187, 541891 and 541899) from the *CANSIM table*. Thus, this estimate includes *Advertising creation* (NAICS 541899) and *Advertising*

distribution activities (NAICS 54183, 54184, 54187 and 541899). The only extra category included is NAICS 54182.

- *Contribution to employment:* The contribution to GDP is calculated using an estimate of GDP for NAICS 5418 from the *LFS*. This estimate also includes contribution to *Advertising creation* and *Advertising distribution*. The only extra category included is NAICS 54182.

10.3 Advertising manufacturing: Not applicable

10.4 Advertising distribution: includes the activities of establishments primarily engaged in NAICS 54183 (Media Buying Agencies), NAICS 54184 (Media Representatives), NAICS 54187 (Advertising Material Distribution Services) and NAICS 541899 (All Other Services Related to Advertising). These NAICS categories are included in *Adverting production* category.

10.5 Advertising support services: Not applicable

11. Festivals

11.1 Festivals creation: includes the activities of establishments primarily engaged in NAICS 7111 (Performing Arts Companies). This NAICS is included in *Performing arts production* category. This category also includes the activities of establishments engages in NAICS 71113 (Musical Groups and Artists) for which data are not available.

11.2 Festivals production: includes the activities of establishments primarily engaged in NAICS 711322 (Festivals without Facilities). We use the festivals data obtained from the Department of Canadian Heritage as a proxy for this NAICS category to calculate the contribution to GDP and the employment counts. It should be noted that the festival data are used in our estimate is not comprehensive since the data from Canadian Heritage only includes data on those festivals which receive funding through the *Cultural Initiatives Program*. Note: Since provincial breakdown for the required NAICS are not available, the provincial allocation of NAICS 711322 (Festivals without facility) is applied to the national estimate to obtain the required provincial breakdowns.

Data sources:

- Festivals data obtained from the Department of Canadian Heritage
- CANSIM table 187-00011

Methodology:

- *Contribution to GDP: Salaries, Wages and Supplementary Labour Income + Net operating surplus (loss) and net income of unincorporated businesses + Depreciation* from the Festivals data obtained from the Department of Canadian Heritage. In order to calculate the depreciation expense, we calculate the proportion of depreciation from operating expense for NAICS 71 (Arts, Entertainment and Recreation) using the Cansim table and apply this proportion to the operating expenses for festival production derived from the Festivals data obtained from the Department of Canadian Heritage.
- *Contribution to employment:* is derived from the Festivals data obtained from the Department of Canadian Heritage.

11.3 Festivals manufacturing: Not applicable.

11.4 Festivals distribution: Not applicable.

11.5 Festivals support services: includes the activities of establishments primarily engaged in NAICS 81321 (Grant Making and Giving Services), NAICS 81331 (Social Advocacy Organizations) and NAICS 8139 (Business, Professional, Labour and Other Membership Organizations). Since many of the NAICS categories for support services are shared by various culture sub-sectors, we combine them all as total GDP from *culture support services.*

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* for NAICS 81321, 81331 and 8139 are derived from the *CANSIM table.*
- *Contribution to employment:* for NAICS 81321, 81331 and 8139 are derived from the *LFS.*

12. Heritage

12.1 Heritage creation: Not applicable.

12.2 Heritage production: includes the activities of establishments primarily engaged in NAICS 71211 (Museums), NAICS 71212 (Heritage and Historic Sites), NAICS 71213 (Zoos and Botanical Gardens) and NAICS 71219 (Other Heritage Institutions). We use the *Survey of Heritage Institutions* as proxy for these NAICS categories to calculate the contribution to GDP and the employment counts.

Data sources:

- Survey of Heritage Institutions
- CANSIM table 187-00011

Methodology:

- *Contribution to GDP: Salaries, Wages and Supplementary Labour Income + Net operating surplus (loss) and net income of unincorporated business + Depreciation* from the *Survey of Heritage Institutions.* In order to calculate the depreciation expense, we use the proportion of depreciation expense from the total operating expense for NAICS 71 (Arts, Entertainment and Recreation) using the CANSIM table and apply this proportion to the operating expenses for heritage production derived from the *Heritage Institutions Survey.*
- *Contribution to employment:* is derived from the *Survey of Heritage Institutions.*

12.3 Heritage manufacturing: Not applicable

12.4 Heritage distribution: Not applicable

12.5 Heritage support services: includes the activities of establishments primarily engaged in NAICS 81321 (Grant Making and Giving Services), NAICS 81331 (Social Advocacy Organizations) and NAICS 8139 (Business, Professional, Labour

and Other Membership Organizations). Since many of the NAICS categories for support services are shared by various culture sub-sectors, we combine them all as total GDP from *culture support services*.

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* for NAICS 81321, 81331 and 8139 are derived from the *CANSIM table*.
- *Contribution to employment:* for NAICS 81321, 81331 and 8139 are derived from the *LFS*.

13. Other information services

13.1 Other information services creation: includes the activities of establishments primarily engaged in NAICS 51911 (News Syndicates). Employment and GDP data for this NAICS are not available.

13.2 Other information services production: includes the activities of establishments primarily engaged in NAICS 519121 (Libraries) and NAICS 519122 (Archives). We use the data from *National Core Library Statistics (NCLSP)* survey as proxy for these NAICS categories in order to calculate the contribution to GDP and the employment counts.

Data sources:

- National Core Library Statistics Program (NCLSP) survey
- CANSIM table 187-00011

Methodology:

- *Contribution to GDP: Net operating surplus (loss) and net income of unincorporated business + Salaries, Wages and Supplementary Labour Income + Depreciation* from the *NCLSP* survey. In order to calculate the depreciation expense, we use the proportion of depreciation expense from the operating expense for NAICS 51 (Information and Cultural Industries) using CANSIM Table 187–00011 and apply this proportion to the operating expenses derived from the *National Core Library Statistics Program (NCLSP) Survey*.
- *Contribution to employment:* is derived from the *NCLSP* surveys ("Full-time equivalent" staff were only reported in the *NCLSP*). Note: Since provincial breakdown for the required NAICS are not available, the provincial allocation of library expenditures is applied to the national estimate to obtain the required provincial breakdowns.

13.3 Other information services manufacturing: Not applicable

13.4 Other information services distribution: Not applicable

13.5 Other information support services: includes the activities of establishments primarily engaged in NAICS 81321 (Grant Making and Giving Services), NAICS 81331 (Social Advocacy Organizations) and NAICS 8139 (Business, Professional, Labour and Other Membership Organizations). Since many of the NAICS categories for support services are shared by various culture sub-sectors, we combine them all as total GDP from *culture support services.*

Data sources:

- CANSIM table 379-0017
- Labour Force Survey (LFS)

Methodology:

- *Contribution to GDP:* for NAICS 81321, 81331 and 8139 are derived from the *CANSIM table.*
- *Contribution to employment:* for NAICS 81321, 81331 and 8139 are derived from the *LFS.*

Endnotes

1. Please see Appendix C for more discussion on the methodology.
2. GDP and employment in individual culture sub-sectors in Ontario are calculated mainly using the *Value added* method. Please refer to Appendix C for a description of these methods.
3. Statistics Canada (2004).
4. For a similar study which estimated and analysed the economic impact of culture in Canada, see Singh (2004).
5. The growth during 1999 and 2000 was mainly due to an increase in government and consumer spending.
6. For a detailed breakdown by culture sub-sector, refer to Appendix A.
7. For a list of surveys and a discussion on the methodology, refer to Appendix C.
8. For a description of various culture activities, refer to Text Box 1.
9. The *Labour Force Survey (LFS)* is a household survey of about 50,000 households carried out by Statistics Canada. It is the only source of monthly estimates of total employment, including self-employment, full and part-time employment in Canada. The LFS classifies workers to industries using the *North American Industrial Classification System (NAICS)*. For occupation, the *Standard Occupational classification (SOC)* system is used.
10. For a list of surveys used, please refer to Appendix C.
11. It should be noted that individuals can either work in a culture related occupation in the culture sector, in a culture related occupation outside the culture sector, or in a non culture related occupation in a culture industry. For example, a librarian working in a statistical research firm is a culture employee outside the culture sector, while a window cleaner employed in a library is a non culture employee in the culture sector.
12. The GDP earned in the culture sector can also be spent in other industries in the economy, thus creating indirect jobs in these industries.
13. For a detailed breakdown by culture sub-sectors, refer to Appendix B.
14. For further explanation, see Statistics Canada (2004).
15. NAICS refers to the North American Industry Classification System.
16. SOC refers to Standard Occupational Classification.

Culture, Tourism and the Centre for Education Statistics

Research Papers

Cumulative Index

Statistics Canada's **Division of Culture, Tourism and the Centre for Education Statistics** develops surveys, provides statistics and conducts research and analysis relevant to current issues in its three areas of responsibility.

The **Culture Statistics Program** creates and disseminates timely and comprehensive information on the culture sector in Canada. The program manages a dozen regular census surveys and databanks to produce data that support policy decision and program management requirements. Issues include the economic impact of culture, the consumption of culture goods and services, government, personal and corporate spending on culture, the culture labour market, and international trade of culture goods and services. Analysis is also published in *Focus on Culture* (87-004-XIE, $8, http://www.statcan.ca:8096/bsolc/english/bsolc?catno=87-004-X).

The **Tourism Statistics Program** provides information on domestic and international tourism. The program covers the Canadian Travel Survey and the International Travel Survey. Together, these surveys shed light on the volume and characteristics of trips and travellers to, from and within Canada. Analysis is also published in *Travel-log* (87-003-XIE, $5, http://www.statcan.ca:8096/bsolc/english/bsolc?catno=87-003-X).

The **Centre for Education Statistics** develops and delivers a comprehensive program of pan-Canadian education statistics and analysis in order to support policy decisions and program management, and to ensure that accurate and relevant information concerning education is available to the Canadian public and to other educational stakeholders. The Centre conducts fifteen institutional and over ten household education surveys. Analysis is also published in *Education Matters* (81-004-XIE, free, http://www.statcan.ca:8096/bsolc/english/bsolc?catno=81-004-X), and in the *Analytical Studies Branch research paper series* (11F0019MIE, free, http://www.statcan.ca:8096/bsolc/english/bsolc?catno=11F0019M).

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81-595-MIE2002001	Understanding the rural-urban reading gap
81-595-MIE2003002	Canadian education and training services abroad: the role of contracts funded by international financial institution
81-595-MIE2003003	Finding their way: a profile of young Canadian graduates
81-595-MIE2003004	Learning, earning and leaving – The relationship between working while in high school and dropping out
81-595-MIE2003005	Linking provincial student assessments with national and international assessments
81-595-MIE2003006	Who goes to post-secondary education and when: Pathways chosen by 20 year-olds
81-595-MIE2003007	Access, persistence and financing: First results from the Postsecondary Education Participation Survey (PEPS)
81-595-MIE2003008	The labour market impacts of adult education and training in Canada
81-595-MIE2003009	Issues in the design of Canada's Adult Education and Training Survey
81-595-MIE2003010	Planning and preparation: First results from the Survey of Approaches to Educational Planning (SAEP) 2002
81-595-MIE2003011	A new understanding of postsecondary education in Canada: A discussion paper
81-595-MIE2004012	Variation in literacy skills among Canadian provinces: Findings from the OECD PISA
81-595-MIE2004013	Salaries and salary scales of full-time teaching staff at Canadian universities, 2001-2002: final report
81-595-MIE2004014	In and out of high school: First results from the second cycle of the Youth in Transition Survey, 2002
81-595-MIE2004015	Working and Training: First Results of the 2003 Adult Education and Training Survey
81-595-MIE2004016	Class of 2000: Profile of Postsecondary Graduates and Student Debt
81-595-MIE2004017	Connectivity and ICT integration in Canadian elementary and secondary schools: First results from the Information and Communications Technologies in Schools Survey, 2003-2004

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Research papers

81-595-MIE2004018	Education and labour market pathways of young Canadians between age 20 and 22: an Overview
81-595-MIE2004019	Salaries and salary scales of full-time teaching staff at Canadian universities, 2003-2004
81-595-MIE2004020	Culture Goods Trade Estimates: Methodology and Technical Notes
81-595-MIE2004021	Canadian Framework for Culture Statistics
81-595-MIE2004022	Summary public school indicators for the provinces and territories, 1996-1997 to 2002-2003
81-595-MIE2004023	Economic Contribution of Culture in Canada
81-595-MIE2004024	Economic Contribution of the Culture Sector in Ontario